### NOTES AND COMMENTS

# THE REDISCOVERY OF THE CLEARWING CHESTNUT MOTH, SYNANTHEDON CASTANEAE (BUSCK) (LEPIDOPTERA: SESIIDAE) IN CONNECTICUT

Bark-boring larvae of clearwing moths cause extensive damage to American chestnut trees (Anagnostakis and Welch, unpubl.), which are surviving chestnut-blightfungus infection because of biological control by hypovirulence viruses (Anagnostakis, 1990; Anagnostakis and Hillman, 1992). Snow and Eichlin (1986) reported this chestnut pest in the southeastern U.S. The insect is illustrated in Eichlin and Duckworth (1988).

#### STUDY SITES AND METHODS

Traps were baited with 1 mg of (E,Z)-3-13-octadecadienyl alcohol dispensed from a rubber septum (Snow and Eichlin, 1986). Two lures were used with water-pan traps to collect specimens for preservation. Ten lures were used with Pherocon 1C sticky traps which were placed at six locations in Connecticut where large American chestnut trees (*Castanea dentata* (Marsh.) Borkh.) were present. One of the locations (Sleeping Giant Chestnut Plantation in Hamden, CT) has trees of all seven species of *Castanea* and hybrids of most combinations. Other locations were orchard plantings at The Experiment Station Farm in Hamden, CT, and American chestnut trees in mixed hardwood forests in Hampton, CT (open and understory trees), Pomfret, CT (open trees), Rocky Hill, CT (canopy trees), and Roxbury, CT (edge of a landscaped yard).

Traps were set weekly from the end of May, 1989 to the end of June, 1989 and collected and examined when they had been exposed for one week.

#### RESULTS

Adult male Synanthedon castaneae (Busck) (a total of 97) were trapped at all of the sites except the forest in Rocky Hill, CT where a single trap was deployed. The largest numbers were found in Hamden, CT in the Chestnut Plantation where 29 were trapped on a sticky trap and two were trapped in a water-pan trap from 1–5 June; from 5–12 June there were 15 on the sticky trap and two in the water trap, and between 12 and 26 June 14 were caught on the sticky trap.

This insect may pose a threat to our chestnut breeding program, and future research will examine the effectiveness of using pheromone traps for control.—Sandra L. Anagnostakis, Kenneth M. Welch, J. Wendell Snow, Kathy Scarborough, and Thomas D. Eichlin, The Connecticut Agricultural Experiment Station, New Haven, Connecticut; Southeastern Fruit and Nut Tree Research Lab, USDA/ARS, Byron, GA; and Division of Plant Industry, California Department of Food and Agriculture, Sacramento, California.

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#### LITERATURE CITED

- Anagnostakis, S. L. 1990. Improved chestnut tree condition maintained in two Connecticut plots after treatments with hypovirulent strains of the chestnut blight fungus. Forest Science 36:113-124.
- Anagnostakis, S. L. and B. Hillman. 1992. Evolution of the chestnut tree and its blight. Arnoldia 52:3-10.
- Eichlin, T. D. and W. D. Duckworth. 1988. The Moths of America North of Mexico, Fas. 5.1, Sesioidea, Sesiidae. Wedge Entomol. Res. Found., Washington, D.C., 176 pp., illustr.
- Snow, J. W. and T. D. Eichlin. 1986. The rediscovery and distribution of the clearwing moth, Synanthedon castaneae (Busck) in the southeastern United States. J. Agric. Entomol. 3:66-67.

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## ON THE NATURAL HISTORY OF CANOPIDAE (HETEROPTERA: PENTATOMOIDEA)

In moist regions of the Neotropics, the undersides of fallen trees are frequently coated with a layer of fungi which may be inhabited by a diverse assemblage of arthropods. While studying mycophagous Coleoptera in Costa Rica, Bolivia and Peru, I became acquainted with this unusual fauna which includes many heteropterous insects; some mycovores (e.g., Aradidae), other predators (e.g., Reduviidae). Among the familiar residents were some slow moving, shiny black, hemispherical pentatomoids. A few specimens collected from several locations were determined to be species of Canopidae, an infrequently collected family whose biology is unknown.

The Canopidae include eight Neotropical species, with some additional names based solely on immatures (Slater, 1982), all belonging to the genus *Canopus* Fabricius (McAtee and Malloch, 1928). The monogeneric family has affinities with Scutelleridae and could also be closely related to Megarididae (McDonald, 1979).

Canopidae were frequently encountered during these field trips; however, they were only collected a few times as part of general faunal samples. Although a wide variety of fungal taxa and life stages are typically available, Canopidae are usually found on sporophores of certain fungi (especially thin encrusting polypores) and are often present as both adults and immatures, suggesting that the association with fungi is not incidental. The following are data for 49 specimens representing two species of Canopidae (deposited in the Cornell University Insect Collection) collected by myself